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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Henri Waelbroeck

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EXAMINER

EBERSMAN, BRUCE I

ART UNIT

PAPER NUMBER

3691

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/799,205	Applicant(s) WAE LBROECK ET AL.	
	Examiner BRUCE I. EBERSMAN	Art Unit 3691	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/10/08</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/22/09 has been entered.

Claims 1-23 presented for examination . Applicant filed an RCE on 1/22/09 amending no claims and submitting an IDS. The examiner has changed grounds of rejection in view of the applicant's arguments and IDS submission, the examiner finds the applicant's arguments to be moot in view of new grounds of rejection

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim19 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Claim 19 recites "activity includes receipt of an order to buy a security and *evidence in market data*" of block selling activity. The examiner unclear what evidence in market data of block selling interest would be and how it could be communicated to the buyer or seller. Evidence in market data could be different things to different people, ie. is it proof of block trading? a report? a graph? Symbols? How much block activity is evident in market data block activity? Is one block enough? Two? More than two? The examiner will interpret this limitation to be notification of "block selling (buying) interest" (i.e. at least one block available to trade).

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-19 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1 and 14, recite a process comprising the steps of receiving data, storing data, receiving orders, storing orders, and executing a trade. Based on Supreme Court precedent, a proper process must be tied to a machine or transform underlying subject matter to a different state or thing (*Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972);

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Cochrane v. Deener, 94 U.S. 780,787-88 (1876)). Since neither of these requirements is met by the claim, the method is not considered a patent eligible process under 35 U.S.C. 101. To qualify as a statutory process, the claim should positively recite the other statutory class to which it is tied, for example by identifying the apparatus that accomplished the method steps or positively reciting the subject matter that is being transformed, for example by identifying the material that is being changed to a different state. In this case, the claims recite electronically receiving market data, calculating a price based on the market data, electronically storing the calculated price in computer readable medium and executing a trade. At best, claims 1,14 contain language that nominally recite a machine. It is noted, the step of execution of the trade is not tied to a machine.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-23 rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 7162447 to Cushing in view of Patent Publication 20030093343 to Huttenlocher and "The Journal of Portfolio Management, Structural Changes in Trading Stocks" by Bartley J Madden, 1993.

As per claims 1,14, Cushing discloses;

(allowing) one or more users of a system accumulation period to receive orders in a security; (acceptance period for orders,(col. 4, lines 40-50)

electronically receiving market data including prices for said security, and calculating a reference price based at least in part on said market data; (reference based on market, (col. 1, lines 1-20, reference is market price)

electronically storing said reference price in a computer readable medium; (col. 1, lines 1-20)

electronically receiving a first order for said security from a first user, wherein said first order comprises a first price limit and a first quantity limit; (col. 5, lines 1-20, limit orders) electronically storing said first order in a computer readable medium;

electronically receiving a second order for said security from a second user, wherein said second order is. contra to said first order and comprises a second price limit and a second quantity limit; (col. 5, lines 1-20, see also, example 1, col. 6, lines 55-65)

executing a trade comprising said first order and said :second order at a trade execution price, and the reference price. (col. 10, lines 1-20, a reference price based on market can be used to execute orders, further, col. 10, lines 49-60, results can be constrained to be within the bid offer spread of the overall market)

Cushing does not explicitly perform electronic notification aside from the fact that the users have access to determine what auctions are ready for bidding. Cushing further does not notify others of contra orders in the system.

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In Cushing, it is not explicitly disclosed whether limit orders have to be crossed at the reference price, thereby minimizing the execution price, ie. wherein said trade execution price complies with said first price limit and said second price limit, and wherein said trade execution price is calculated to minimize a difference between said reference price and said trade execution price.

Huttenlocher teaches a system (background) that was known in the art at the time of his invention called ITG's Posit where trades could be conducted at (mid) market price of the stock based on current market pricing. (0005). If the two limit orders are correctly positioned, around the market price which could also be used as the reference (market based in part on the reference), then if the crossing is done at market center, then the execution will minimize the difference between the market and the reference price.

It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the block trading method of Cushing with the parasitic price optimization of Huttenlocher for the motivation of simple and efficient pricing. (0005) Cushing and Huttenlocher do not explicitly disclose electronic buyer notification, though access is provided to allow the buyer to monitor the market. The Journal of Portfolio Management teaches a large block system where notification can be made to potential customers. (col. 24, Last paragraph)

It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the disclosure of Cushing with the notification teachings of The Journal of Portfolio Management for the motivation of providing lower trading costs by alerting buyers to trading opportunities. (p. 20, col. 2, para. 2)

As per claim 2, Cushing discloses;

(notification where) (b) if said first order comprises a sell order and said first price limit is less than or equal to said reference price, or if said first order comprises a buy order and said first price limit is greater than or equal to said limit price; (col. 11, lines 20-50, traders are notified, provided feedback if trades do not occur which would allow them to change their bid or opt for their orders to be completed outside of the batch auction)

Cushing does not explicitly disclose; notifying contra parties of pending orders.

Huttenlocher provides access to parties to see an offer (0032) but does not explicitly perform a notification task.

The Journal of Portfolio Management teaches;

Contra party notification, p. 24, col. 2, last paragraph)

It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the disclosure of Cushing with the notification teachings of The Journal of Portfolio Management for the motivation of providing lower trading costs by alerting buyers to trading opportunities. (p. 20, col. 2, para. 2)

As per claim 3, Cushing discloses; a predetermined price discovery period (col. 3, lines 30—50) Cushing does not explicitly disclose notification for the purpose of allowing an increase in price aggression. (ie. improve price bid/offer). The journal of portfolio Management. P. 23, col. 2 discloses yellow light trading which notifies market

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participants of a block order so that they could take advantage of the block trade by bidding or improving their price.

It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the time period disclosure of Cushing with the notification teachings of The Journal of Portfolio Management for the motivation of providing lower trading costs by alerting buyers to trading opportunities. (p. 20, col. 2, para. 2)

As per claim 4, Cushing discloses;

calculating a reference price for said security based at least partially on said market data; (col. 9, lines 55-65) .

As per claim 5, Cushing discloses a reference price as important to the transaction system. (col. 9, lines 55-65).

As per claim 6, Cushing discloses block trades (col. 5, 50-55). Cushing does not explicitly disclose notification when the 2nd order is at least as aggressive as the passive end of said block range. Huttenlocher (0033-36) teaches investor specificity as to levels of aggressiveness in regards to showing his/her order, whereby the investor can specify the block range that would implicitly be calculated to determine if the investor specified aggressive stances are met. It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the block disclosures of Cushing with the investor specified aggressiveness teachings of Huttenlocher for the purpose of

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creating a confidential trading system that would allow security block sales to be negotiated when the buyer and seller prices are within a reasonable variance.

As per claim 7, Cushing discloses block trading, (col. 5, lines 50-55), Cushing (col. 9, lines 40-45) disclose the use of recent market volatility in the calculation of pricing block trades.

As per claim 8, Cushing discloses that in certain cases, the price range can be determined based on recent market activity, (col. 10, lines 5-20) which serves a reference for block pricing.

As per claim 9 Cushing discloses pricing based on recent market activity as a basis of influencing trade prediction. (col. 10, lines 5-20).

As per claim 10, Cushing discloses; using the market price (reference) to influence the transaction price of trades which include block type trades. (col. 10, lines 5-10).

As per claim 11, Cushing discloses; pricing based on market (col. 10, lines 5-20).

Cushing does not disclose notification based on ranges of aggressiveness of an order. Huttenlocher (0033-6) teaches levels of aggressiveness for the purpose of disclosing orders. It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the anonymous indication disclosure of and the market

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pricing and the market aggression teachings of Huttenlocher for the purpose of notifying other trading participants when a aggressively price order is pending in the system without disclosing the specific party and position.

As per claim 12, Cushing and Huttenlocher notify traders but, not explicitly such that a trader is notified of a near match “contra order”. The Journal of Portfolio Management teaches a large block system where notification can be made to potential customers. (p. 23, col. 2 and p. 24, Last paragraph)

It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the disclosure of Cushing with the notification teachings of The Journal of Portfolio Management for the motivation of providing lower trading costs by alerting buyers to trading opportunities. (p. 20, col 2, para. 2)

As per claim 13, Cushing discloses; a predetermined price discovery period (col. 3, lines 30—50) Cushing does not explicitly disclose contra order notification. The journal of portfolio Management. P. 23, col. 2 discloses yellow light trading which notifies market participants of a block order so that they could take advantage of the block trade by bidding or improving their price. It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the time period disclosure of Cushing with the notification teachings of The Journal of Portfolio Management for the motivation of providing lower trading costs by alerting buyers to trading opportunities. (p. 20, col. 2, para. 2)

As per claim 15, Cushing (col. 3, lines 5-20) discloses order acceptance and that traders are made aware of the time periods when they can place orders. Cushing does not explicitly disclose an electronic notification prior to the order placement.

Huttenlocher teaches that the participants can be communicated (notified) via web browsers of for example orders. (0098) It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the communication disclosures of Cushing with the electronic notification of Huttenlocher for the purpose of notifying other trading participants when a aggressively price order is pending in the system without disclosing the specific party and position. (see also Journal of Portfolio Management – Yellow light, notification of contra orders)

As per claim 16, Cushing discloses predetermined times (col. 3, lines 50-55 for conducting trading. Cushing and Huttenlocher do not explicitly disclose evidence of block selling interest.

As per claim 17, Cushing discloses predetermined times for trading. (col. 3, lines 50-55). Further Cushing discloses communications between buyers and sellers. (col. 5, 5-20) for block trades.

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As per claim 18 Cushing discloses orders to buy and sell securities in block transactions, (col. 5, lines 1-25)

As per claim 19, Cushing discloses indications of block selling interest. (col. 5, lines 1-20). Cushing and Huttenlocher do not explicitly disclose. Communication of evidence in the market of block trading interest.

The journal of portfolio Management. P. 23, col. 2 discloses yellow light trading which notifies market participants of a block order so that they could take advantage of the block trade by bidding or improving their price. It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the time period disclosure of Cushing with the notification teachings of The Journal of Portfolio Management for the motivation of providing lower trading costs by alerting buyers to trading opportunities. (p. 20, col. 2, para. 2)

As per claim 20, Cushing discloses an electronic trading system. (col. 9, lines 45-50) and reference pricing for securities based at least partially based on market data. (col. 9, lines 55-65, reference is the market price)

Cushing does not explicitly disclose;

a trade facilitation computer system comprising a facilitator module, a financial information exchange server, a transactional database, and an analytics server operative to calculate reference prices for securities,

wherein said trade facilitation computer system is in communication with a financial

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information exchange network and a communication network,
wherein said financial information exchange network is in communication with said
communication network,

wherein said communication network is in communication with one or more user
terminals; and

an execution engine in communication with said trade facilitation computer system,

wherein said execution engine is operative to, execute a trade for a first order for a
security and a second order for said security at a trade execution price, wherein said
trade execution price complies with a first price limit of said first order and a second
price limit of said second order,

Huttenlocher teaches trading systems including computers, databases and networks.
(fig. 1 for example) and a system that was known in the art at the time of his invention
called ITG's Posit where trades could be conducted at (mid) market price of the stock
based on current market pricing. (0005). If the two limit orders are correctly positioned,
around the market price which could also be used as the reference (market based in
part on the reference), then if the crossing is done at market center, then the execution
will minimize the difference between the market and the reference price.

It would therefore have been obvious to one of ordinary skill in the art at the time of the
invention to combine the block trading method of Cushing with the parasitic price
optimization of Huttenlocher for the motivation of simple and efficient pricing. (0005)

Cushing and Huttenlocher do not explicitly disclose electronic buyer communication notification, though access is provided to allow the buyer to monitor the market. The Journal of Portfolio Management teaches a large block system where notification can be made to potential customers. (col. 24, Last paragraph)

It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the disclosure of Cushing with the notification teachings of The Journal of Portfolio Management for the motivation of providing lower trading costs by alerting buyers to trading opportunities. (p. 20, col. 2, para. 2)

As per claim 21, Cushing discloses the user of reference pricing in the facilitation of trades. (col. 5, lines 1-20) Cushing does not explicitly disclose price aggression. Huttenlocher (0033-36) teaches investor specificity as to levels of aggressiveness in regards to showing his/her order, whereby the investor can specify the block range that would implicitly be calculated to determine if the investor specified aggressive stances are met. It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the block disclosures of Cushing with the investor specified aggressiveness teachings of Huttenlocher for the purpose of creating a confidential trading system that would allow security block sales to be negotiated when the buyer and seller prices are within a reasonable variance.

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As per claim 22, Cushing discloses; a notification to a first user who has placed a first order comprising a first price limit in said security that a contra order to said first order has been received by said trade facilitation computer system (col. 11, lines 20-50, traders notified, provided feedback, which would allow them to change their bid or opt for orders to completed outside in a batch auction)

Cushing does not explicitly disclose counterparty notification.

Huttenlocher provides access to parties to see an offer (0032) but does not explicitly perform a notification task.

The Journal of Portfolio Management teaches; contra party notification, where the contra parties are priced reasonably, (p. 24, col. 2, last paragraph)

It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the disclosure of Cushing with the notification teachings of The Journal of Portfolio Management for the motivation of providing lower trading costs by alerting buyers to trading opportunities. (p. 20, col. 2, para. 2)

As per claim 23, Cushing does not explicitly disclose minimum block sizes. Huttenlocher (0105) teaches minimum block requirements where a user can determine minimum order sizes to which his order can be displayed.

It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the trading concepts of Cushing and the block sizes teachings Huttenlocher for notifying an aggressive party when an opportunity for price

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improvement arose for the motivation of of creating a fair and efficient execution market which is less prone to manipulation. (col. 2, lines 20-40)

Response to Arguments

Claims 1-23 presented for examination . Applicant filed an RCE on 1/22/09 amending no claims and submitting an IDS. The examiner has changed grounds of rejection in view of the applicant's arguments and IDS submission, the examiner finds the applicant's arguments to be moot in view of new grounds of rejection

In regards to the applicant's arguments of claim 1, 14, 20, that Huttenlocher does not disclose minimizing the difference between the reference and trade execution price, the examiner is citing to 005 in the background which discloses a system ITG's Posit where orders are traded based on pricing in a separate market. This is especially true when the market is the same as the reference price. And the execution price is done at market which is the goal. The yellow light trading system in the Journal of portfolio management, as provided by applicant IDS also teaches anonymous notification of buyers/sellers of the availability of block orders to be traded near the current market prices. Whereas, the yellow light trading does not utilize the words "minimize the difference" the idea is to try to trade as close to market as possible.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRUCE I. EBERSMAN whose telephone number is (571)270-3442. The examiner can normally be reached on 630am-5pm, Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander Kalinowski can be reached on (571) 272-6771. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Alexander Kalinowski/
Supervisory Patent Examiner, Art Unit 3691

Bruce I Ebersman
Examiner
Art Unit 3691
